Project Narrative

For this project, I decided to explore an issue of dissent that is very close to the hearts of many Americans in today's time. Mass shootings are becoming more and more of a problem in the United States, and around the world. This problem has sparked the discussion of many different possibilities on how to potentially control these shootings. Do we need more regulated gun control laws? Do we need to provide people with the weapons to protect themselves when the incidents take place? Do we need more sources of help for those dealing with different disorders or other struggles? There are so many different ideas about how to combat this problem that have been debated for quite some time, but the problem still persists in great magnitude.

I decided to focus on finding patterns in the shooters' different motives, in order to learn what sparks the enraged behavior and in which places the shooter chooses to then act. Maybe if we were able to identify red flags related to these patterns, we would be able to take proper action and prevent the shootings from occurring in the first place.

In order to collect the data, I looked through many different databases, including Kaggle, where I ended up finding a dataset that detailed the mass shootings in America from 1966-2016. The data was very extensive, including information on the date, location of the shooting, the shooter's relationship to that location, the number of victims, and much more. After combing through the data, I chose to start by simply creating a timeline. By plotting the number of shootings over time, I was able to see that the number of shootings, or at least the number of shootings that have been recorded, has greatly increased in the past 10 years. So, clearly the United States has a severe problem at hand. The next question to answer, was why were these shootings taking place? What was is that lit a fire in the shooter? And then, how can we use what we know about the motives and patterns in order to stop the next one from happening?

After further exploring the data in Tableau, I decided that I would continue delve deeper into the issue of shooter motives. Interesting patterns were beginning to present themselves when the information was filtered on different motives and cross analyzed by the shooters relationship to the incident location. By moving the data into brackets, I was able to create a visual that was interactive, and allowed me to view only the information that I was interested in seeing at certain times. At the beginning, I struggling with the grasp of understanding how to use my knowledge of html, CSS, and D3, in order present the data in a way that was functional and visibly satisfying.

Once I got the hang of the coding mechanisms, I decided to stick with the idea of the timeline, which I deemed to be appropriate for this dataset. I then wanted some way to express the magnitude of each shooting. To do this, I chose to illustrate each victim in the shootings with a small circle extending outwards from the timeline. Due to the extensiveness of the dataset, I was able to add another dimension to this, and separate the victims by those injured and those killed. I used the x-axis to act as the division between the two.

Next, I chose two different filters on which to organize my data. The first was a color code for each of the different potential motives in the shootings. Then, I added a drop down bar that would allow the viewer to filter the data on the shooter's relationship to the killing as well. Adding both of these dimensions to the visual allows another possible way, besides for time and magnitude, that allow the viewer to begin to see a pattern. Now, potential causes of the shootings are apparent in the dynamic visual. The viewer can explore the different aspects of the visual in order to come to different conclusions about how to possibly diminish the number of mass shootings in America.

There were many interesting findings through this exploration. The ones that I found that I believe could potentially be solved through further discussion, are those shootings related to place of work and school. Clearly, there is a pattern between financial difficulties and mental illness at both of these places, respectively. My hope is that if people are able to see the data that supports this claim, then they will be willing to open the floor to further discussions about how to deal with these specific problems and mitigate the motives that can help lead to shootings.

Yes, it has been known for a while that mental illness can be a factor in the cause of mass shootings, but being able to see the correlation with this motive and shootings that occur at the shooter's place of education could lead to a discussion of effective solutions to the problem. Perhaps providing more help for students who deal with these problems during school time would be one step in the right direction. Or, maybe schools need to do more to ensure that the stress of the work is not affecting students too much to the point where they are developing these mental illnesses. There is no one solution to this problem, but digging deeper into exactly why these shootings are occurring can help us understand how and where to begin taking the proper steps to mitigate the problem.

When it came to creating my visual, I had a very difficult time. Once I imported my svg elements into illustrator, I struggled to convey the same message that they dynamic version presented. With the limiting functionality of a static image, it is difficult to show the magnitude of factors that you could possibly present with a dynamic visual. In order to attempt this, I called out specific events that were interesting and of large magnitude, including one at a school with a mental illness motive, and one at a place of work with a financial motive. This allows the viewer to get an idea of what is going on with all of the data even without having the dynamic filter.

Overall, I thoroughly enjoyed working on this visual. It was exciting to have a culmination of all of the semesters work incorporated into one project. Even though I found the dynamic aspect of the project to be the most difficult, I also found it to be the most exciting and rewarding. Adding this dynamic aspect to the visual made it far more appealing and gives the person viewing the visual the option to explore the data in different ways in which he or she chooses.